

Notice of Allowability

Application No.

09/974,905

Examiner

Kim-Kwok CHU

Applicant(s)

KAMON ET AL.

Art Unit

2653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed on 8/13/2004.
2. ☒ The allowed claim(s) is/are 2-6, 8, 9, 11 and 12 which are renumbered as 1-9 respectively.
3. ☒ The drawings filed on 12 October 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Allowable Subject Matter

1. Claims 2-6, 8, 9, 11 and 12 are allowable over prior art.
2. The following is an Examiner's statement of reasons for the indication of allowable subject matter based on the Amendment filed on August 13, 2004:

As in claims 2, the prior art of record fails to teach or fairly suggest a laser diode for recording data in the recording medium and/or reproducing having the following features:

(a) the first data include a forward current value of the laser diode;

(b) the second data include the initial forward current value of the laser diode, and also data indicating the ratio of the forward current value to the initial forward current value for making a decision as to the service life of the laser diode; and

(c) the data generating means generates, from the first and second data, the third data relative to the service life of the laser diode.

As in claim 3, the prior art of record fails to teach or fairly suggest a laser diode for recording data in the recording medium and/or reproducing having the following features:

(a) the measuring means measures the accumulated emission time of a laser beam from the laser diode;

(b) the first data include the accumulated laser beam emission time of the laser diode measured by the measuring means;

(c) the second data include the mean time to failure of the laser diode; and

(d) the data generating means generates, on the basis of the first and second data, the third data relative to the service life of the laser diode.

As in claim 6, the prior art of record fails to teach or fairly suggest a recording/reproducing apparatus having the following features:

(a) a second memory means for storing the output value of a temperature sensor obtained at a predetermined temperature, wherein the first data include temperature data; and

(b) the measuring means measures the temperature by comparing the present output value of the temperature sensor with the prerecorded output value of the temperature sensor obtained at the predetermined temperature and stored in the second memory means.

As in claim 8, the prior art of record fails to teach or fairly suggest a method of detecting the internal state of a recording/reproducing apparatus having the following step:

(a) the first data are measured by accumulating the emission time of the laser beam from the laser diode; and

(b) the third data are generated by comparing the second data, which represent the service life of the laser diode, with the first data.

As in claim 9, the prior art of record fails to teach or fairly suggest a method of detecting the internal state of a recording/reproducing apparatus having the following step:

(a) the first data include the result of measuring the forward current of the laser diode;

(b) the second data include the initial forward current value of the laser diode, and also the rate of the forward current value, which is used for making a decision as to the service life of the laser diode, with the initial forward current value; and

(c) the third data relative to the service life of the laser diode are generated from the first and second data.

As in claim 11, the prior art of record fails to teach or fairly suggest a method of detecting the internal state of a recording/reproducing apparatus having the following step:

(a) the first data include data for calculating the forward current value of the laser diode; and

(b) the second data include the initial forward current value of the laser diode, and also the ratio of the forward current value, which is used for making a decision as to the

service life of the laser diode, with the initial forward current value.

As in claim 12, the prior art of record fails to teach or fairly suggest a recording/reproducing apparatus having the following features:

(a) the measuring means measures the accumulated emission time of the laser beam from the laser diode; and

(b) the second data include data indicative of the mean emission time to failure of the laser diode.

The features indicated above, in combination with the other elements of the claims, are not anticipated by, nor made obvious over, the prior art of record.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably **accompany** the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kaneko et al. (5,798,992) is pertinent because Kaneko teaches a laser diode monitoring apparatus.

Amada et al. (5,710,787) is pertinent because Amada teaches a laser diode controlling device.

Kenjo (5,029,155) is pertinent because Kenjo teaches a laser diode monitoring device.

Kobayashi et al. (4,796,250) is pertinent because Kobayashi teaches a laser diode controlling device.

5. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C.
20231 Or faxed to:

(703) 872-9306 (for formal communications intended for
entry. Or:

(703) 746-6909, (for informal or draft communications,
please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park
II, 2021 Crystal Drive, Arlington. VA., Sixth Floor
(Receptionist).

Any inquiry of a general nature or relating to the status of
this application should be directed to the Group receptionist
whose telephone number is (703) 305-4700.

Any inquiry concerning this communication or earlier
communications from the examiner should be directed to Kim CHU
whose telephone number is (703) 305-3032 between 9:30 am to 6:00
pm, Monday to Friday.

ke 9/3/04
Kim-Kwok CHU
Examiner AU2653
September 3, 2004

(703) 305-3032

William Korzuch
WILLIAM KORZUCH
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